

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No.: 08/917,480 Confirmation No.: 4794  
Applicant(s): Wakayama  
Filed: 08/26/1997  
Art Unit: 3644  
Examiner: Tien Quang Dinh  
Title: RECONFIGURATION CONTROL SYSTEM FOR  
AN AIRCRAFT WING

Customer No.: 00826

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY BRIEF UNDER 37 CFR § 1.193**

Appellant, within a two (2) month period from the June 28, 2006 mailing date of the Examiner's Answer, herein files a Reply Brief in accordance with the provisions of 37 CFR §1.193(b).

Appellant notes that the Response to Argument (Section 10, pages 4-6) set forth in the Examiner's Answer mailed June 28, 2006 is substantially the same as the corresponding section (Section 11, pages 3-5) of the Examiner's Answer mailed on March 31, 2003, prior to the return of the application from the Board of Patent Appeals to the Examiner on July 31, 2003. Applicant addressed each of these arguments in Applicant's Reply Brief under 37 C.F.R. § 1.193, filed June 2, 2003. Nevertheless, Applicant again addresses the Examiner's Answer below.

In response to the arguments advanced by the Examiner in the Response to Argument section of the Examiner's Answer, Appellant makes the two following points of clarification.

First, in the Supplemental Appeal Brief filed April 17, 2006, Appellant argued that:

"It is respectfully submitted that the final rejection has again failed to comply with these minimum requirements. Appellant is left to guess which passages of the applied references are being relied upon in formulating the rejection. Moreover, Appellant can only speculate as to how the references are being combined and to what passage of which reference is being employed as supplying the motivation for the combination. For example, Appellant believes that the Final

Office Action does address, i.e., suggest, replacement of the control system taught by the Ashkenas with that taught by Whitener. However, the Final Office Action has expressly stated that the Examiner is **not suggesting a combination of these references**. As stated on page 4 of Paper No. 32,

‘The Examiner in no way intended to suggest that the control system of Whitener be used in the Ashkenas’ reference. It is clear from the teaching of Whitener (see column 10, last paragraph to column 11, lines 29) that Ashkenas’ aircraft control surfaces have predetermined positions so as to perform certain flight maneuvers/conditions with optimized spanwise force distribution across the wing.’”

Supplemental Appeal Brief filed April 17, 2006, pages 8-9 (emphasis in original).

In the Examiner’s Answer, the Examiner again asserts on page 5 that “the Examiner does not suggest moving the parts of Whitener or Lewis on the Ashkenas flight system.” However, on the following of the Examiner’s Answer, the Examiner states that:

“The Examiner would like to point out that the Examiner has used the decision by the board of appeal as a road map in treating the respected case. In the decision by the board (paper 15), the board suggested that the Examiner may wish to consider computer-based flight management systems, aircraft operating manuals, and pilot operating handbooks. The Examiner has done so by introducing the Whitener and Lewis to show that the claim subject matters are well known in the art and it would be obvious for one skilled in the art to have ‘combined’ the references.”

Examiner’s Answer mailed June 28, 2006, page 6 (emphasis in original).

Based on these assertions by the Examiner, Appellant is unable to fathom how the Examiner is actually employing the alternative secondary references in rejecting the pending independent claims.

Assuming *arguendo* that the Examiner is “combining” one of the secondary references in the classical sense, i.e., combining parts of Ashkenas with teachings found in either Whitener or Lewis, the Examiner has failed to address Items (2) and (3) set forth in M.P.E.P. §706.02(j), which are part of the minimum requirements for establishing a “prima facie” case of obviousness.<sup>1</sup> As set forth in the Supplemental Appeal Brief, the Examiner has not identified which parts of the various references are being incorporated into a combination of elements

---

<sup>1</sup> 35 U.S.C §103 authorizes a rejection where to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. §103, the examiner should set forth in the Office Action (1) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, (2) the difference or differences in the claim over the applied reference(s), (3) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (4) an explanation why such proposed modification would have been obvious to one of ordinary skill in the art at the time the invention was made. See M.P.E.P. §706.02(j).

which collectively renders the claimed invention obvious.

In contrast, assuming *arguendo* that the Examiner is asserting that one of ordinary skill in the art would know how to modify Ashkenas given the teaching of either Whitener or Lewis, Appellant is still left in the patently unfair position of rebutting the assertion that it would have been obvious to modify the Ashkenas system with the general knowledge of Whitener that suggests that something is possible since it *may* inherently produce results that are advantageous. This is not the fact based inquiry into obviousness dictated by 35 U.S.C. §103. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See M.P.E.P. §2143, citing In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990).

Secondly, the Examiner again assumes the inherency of an express limitation of the pending claims based on the teachings of Lewis or Whitener without establishing any nexus between the teaching of the secondary references and the recitation in the pending claims. The Examiner assumes that there is a connection between a reference teaching that the position of a first control surface is controlled to increase in the local coefficient of lift and the other control surfaces are positioned to control pitch trim and optimum spanwise force distribution. The rejections do not establish any correlation between using the control surface configuration system as taught by Whitener in Ashkenas' system to increase the maneuverability of the aircraft and to prevent detrimental effects on the aircraft and the recited **"control surface reconfiguration system wherein, for each of a plurality of different flight conditions, the flight control surfaces are selectively reconfigurable to respective predetermined positions, which in combination, optimize the spanwise force distribution across the wing for each of the plurality of different flight conditions."** Stated another way, assuming that the control surfaces taught by Whitener operate as suggested by the Examiner, this cannot (and does not) establish that these control surfaces **necessarily** optimize the spanwise force distribution across the wing, especially the wing actually taught by Ashkenas. Since all of the references cited in rejecting the pending claims are silent with respect to optimized spanwise force distribution, no possible combination of the applied references can render any of the pending claims obvious.

Pursuant to the foregoing, as well as to the arguments contained in Appellants' Supplemental Appeal Brief dated April 17, 2006, Appellant respectfully requests that all of the Examiner's rejections be reversed, and that the application be passed to issue at the earliest opportunity.

Appellant does not wish to participate in an Oral Hearing. The Appellant respectfully requests that the Board act on the papers submitted in making its determination.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Nich Gallo". The signature is fluid and cursive, with the first name "Nich" and last name "Gallo" clearly distinguishable.

Nicholas F. Gallo  
Registration No. 50,135

**CUSTOMER NO. 00826**  
**ALSTON & BIRD LLP**  
Bank of America Plaza  
101 South Tryon Street, Suite 4000  
Charlotte, NC 28280-4000  
Tel Charlotte Office (704) 444-1000  
Fax Charlotte Office (704) 444-1111  
LEGAL02/30033990v1

**ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON August 22, 2006.**